# FREQUENTLY ASKED QUESTIONS & ANSWERS Alternate Point of Compliance (APC) Variance Petition Solid Waste Landfill Facilities

Land Protection and Revitalization Office of Solid Waste 629 East Main Street, 5th Floor Richmond, Virginia 23219

#### **Introduction:**

The Virginia Solid Waste Management Regulations (VSWMR) allow the landfill owner/operator the option to request a variance to the location of the groundwater monitoring system other than at the default location defined as the disposal unit boundary (9 VAC 20-81-250 A 3 a). The requested location is referred to as an alternate point of compliance (APC). Virginia's APC allowance is sourced from Federal language in 40 CFR 258.40.(d). While EPA's Subtitle D rule established the criteria an APC must meet, the Federal language did not define the manner under which states approved the use of such allowance. Virginia approves the APC allowance under the variance process (9 VAC 20-81-760).

Specific information regarding the APC variance approval process is discussed in further detail below. For any other questions, please contact the Groundwater Program Coordinator, Mr. Geoff Christe at (804) 698-4283.

#### **APC Variance Petition:**

#### 1] What actions could trigger the need to submit an APC variance petition?

A petition for variance would be required if there is a need to place or relocate a compliance well at a location other than the disposal unit boundary and this need is not triggered by a physical obstacle [9 VAC 20-81-250.A.3.a.(2)] such as haul roads, storm water run-off or collection features, power lines, leachate or landfill gas conveyance lines, engineering aspects of expansion of the unit or closure of the unit, etc.

## 2] What well relocation/replacement actions would not trigger the need to submit an APC variance petition?

Owner/operators are not required to submit an APC variance petition when physical obstacles prevent installation of compliance monitoring wells at the edge of the disposal unit. In this situation, compliance wells may be installed at the closest practical distance downgradient of the unit [9 VAC 20-81-250.A.3.a.(3)]. Such a relocated well would not be considered an APC.

#### 3] What information does the APC variance petition need to include?

From an administrative standpoint, the petition must include the items required under 9 VAC 20-81-720.A. and 760.A.1, including the certification statement. In addition, APC variances must include the technical requirements of 9 VAC 20-81-740. Please refer to the Department's APC Submission Instructions for additional information.

#### 4] Is there a cost with the submission of an APC Variance petition?

Most commonly, the APC request will deal with a single compliance well. As a result, the fee associated with the variance will be the base fee (currently \$390). For sites which are proposing to move a groundwater monitoring "system" (i.e., all or a majority of the downgradient compliance wells) to an APC, then the supplemental fee (currently \$920) will be added to the base fee [9 VAC 20-90-120, Table 3.1-3].

#### 5] Where does the fee get submitted?

The fee should be submitted to DEQ-Receipt Control at P. O. Box 1104, Richmond, VA 23218. A photocopy of the check should be included in the variance submission as proof of fee payment.

#### 6] How will the variance petition be processed?

A variance requesting use of APC will be reviewed for content completeness. If the information contained in the variance petition is deemed to be insufficient, the Director will request that additional information be furnished in accordance with 9 VAC 20-81-760.B.1.

If the submission has been deemed complete, the Director will make a tentative decision to grant or deny the request. This decision will be based on the technical review of the information contained within the complete submission as well as the topics described within 9 VAC 20-81-740.C. If the request is tentatively denied, the Director will offer the owner/operator the chance to withdraw the request or resubmit the request with revised information (9 VAC 20-81-760.B.3.b). If the request is not withdrawn or revised, the Director will proceed with public notification (9 VAC 20-81-760.B.3.c).

#### 7] What are the public participation requirements?

The tentative decision will be subject to a 30-day public comment period and will be advertised in a local newspaper that has circulation where the facility is located [9 VAC 20-81-760.B.3.c.].

#### 8] Who pays the cost associated with the newspaper advertisement?

The landfill owner/operator (or designated representative) is responsible for paying for the cost of the one time advertisement in the local newspaper [9 VAC 20-90-70.C]. This cost is not covered under the variance submission fee.

#### 9] What if an interested citizen objects to the use of an APC?

Comments submitted for review and consideration during the 30-day public comment period will be evaluated and addressed by the Department [9 VAC 20-81-760.B.3.c-d].

#### 10] How long will it take to receive a decision?

The Director is required to issue a final decision on the APC variance request within 15-days of the close of the public comment period (9 VAC 20-81-760.B.3.d) by notifying the applicant and any commenting individuals. The final decision may be variance denial, variance approval as requested, or the granting of a modified or partial variance (9 VAC 20-81-720.B.1).

#### 11] Is a Permit amendment required?

The permittee will need to update their groundwater monitoring plan to address the APC variance approval to the compliance network location and request a minor permit amendment. The permit amendment may be requested either concurrently with the variance request or after the variance is

granted. However, it is important to note that upon variance approval, the APC is approved for use in the network (such that the facility is not adversely affected by any delays in processing the minor amendment request).

#### **APC Technical and Risk Screening:**

#### 12] What are the physical siting requirements for an APC well?

An APC must be located within the permitted facility boundary and shall not be located farther than 500 feet from the disposal unit boundary [9 VAC 20-81-740.A.] which is an approximation of the EPA defined requirement in the Subtitle D rule which is 150 meters (492 feet). Based on this requirement, the Department can not approve an APC site farther than 492 feet from the unit boundary for Subtitle D facilities.

Since the Director will consider the distance from the permitted facility boundary and the nearest groundwater user or potentially affected surface water [9 VAC 20-81-740.C.1], the facility should consider these distances in proposing the APC location. The owner/operator should also be cognizant of EPA's discussion on locating the APC at a property boundary. EPA noted in Appendix F to the Subtitle D preamble [56 FR 51068; October 9, 1991] that: "... the alternate boundary ... must be located on property owned by the owner/operator to prevent contamination off site." The Department will not be able to approve of a proposed APC well location which is at a property boundary or located so close that contamination discovered in the APC will have no reasonable chance to be remediated prior to its migration off site.

The Department's program history suggests it takes no less than 1 to 2 years to install an aggressive groundwater remediation system including extraction wells, remediation systems, and to acquire treatment discharge permits. To account for this reality, in general it is advised that no APC well be proposed in a location which is less than 3 groundwater travel time years away from the permitted facility boundary. For facilities with extremely high or low flow rates, it may be necessary to collect additional site specific data to calculate accurate flow rates.

#### 13] What if an APC cannot be located within the current permitted facility boundary?

The owner/operator may choose to submit a Part A revision to modify the facility boundary. If a Part A revision is needed, it should be submitted concurrently with the APC variance request. If a facility does not have a Part A, then the owner/operator should submit: (1) a vicinity map meeting the requirements of 9 VAC 20-81-460 C, which should also identify the current and proposed facility boundary and (2) demonstrate legal control over the site for the permit life, as required by 9 VAC 20-81-460 D. If there are questions about submission of a Part A revision, please contact your Regional Office.

#### 14] Do I need Department pre-approval of my APC location?

The VSWMR do not require Department pre-approval for a requested location of a groundwater APC; however, the owner/operator is strongly suggested to contact their Regional Office to discuss well location and depth of completion prior to well installation to lessen the chance that the Department will find issue with the chosen location. Any APC well must be located in a manner which can determine the landfill's impact on the quality of groundwater in the uppermost aquifer, per 9 VAC 20-81-250 A.2.a and meet the physical siting requirements per 9 VAC 20-81-740.A at a minimum.

#### 15] What risk receptors need to be considered?

The applicant must consider the nearest current groundwater users (including potable and non-potable uses [9 VAC 20-81-740.B.4], expected future groundwater use [9 VAC 20-81-740.6], and potentially affected surface water [9 VAC 20-81-740.C.1.].

**Groundwater** is defined as any water, except capillary moisture, beneath the land surface in the zone of saturation or beneath the bed of any stream, lake, reservoir or other body of surface water wholly or partially within the boundaries of this Commonwealth, whatever the subsurface geologic structure in which such water stands, flows, percolates or otherwise occurs [§ 62.1-255 of the Code of Virginia].

**Expected future use** should be considered unrestricted groundwater use for the site and the surrounding properties regardless of the current usage unless prohibited by some binding legal provision.

*Surface water* is defined as all state waters that are not groundwater [9-VAC 20-81-10].

**State waters** are defined as all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands [§ 62.1-44.3 of the Code of Virginia].

#### **APC Usage with GPS Exceedance(s):**

## 16] Can an APC Variance be requested if an on-site compliance well is already showing groundwater impacts?

Yes, although any owner/operator who requests use of an APC to potentially avoid the need to address groundwater impacts at the edge of the waste assumes the risk of having to remediate a much larger extent of impaired groundwater if groundwater protection standard (GPS) exceedances are recognized in the APC well(s) in the future. While EPA acknowledged one of the goals of using an APC was to allow for potential contaminant concentrations to: "... diminish due to degradation, dispersion, and attenuation", there is no guarantee that this will be successful in diminishing contaminant concentrations to below groundwater protection standards in every instance.

The use of APC is but one of several options that may be applied to a groundwater exceedance. Other options include an Alternate Source Demonstration (9 VAC 20-81-250.A.5), site-specific Alternate Concentration Level use (9 VAC 20-81-250.A.6.b.(4).(b)), installation of additional wells to revise site background (9 VAC 20-81-250.A.4.d/e), and plume characterization (9 VAC 20-81-260.C.1.a). It is the responsibility of the owner/operator to choose the option that best fits his/her site conditions.

## 17] If an APC is approved and the facility is already in the corrective action program, how long does the facility need to monitor before requesting corrective action completion if the APC does not show any exceedances?

The facility would need to submit three consecutive years of data showing no Table 3.1 Column B constituents have exceeded GPS within the approved APC (9 VAC 20-81-260.H.1.a.).

#### 18] Can an existing well be proposed as an APC?

Yes, an owner/operator can request a variance to use an existing well (including permitted sentinel wells, characterization wells, etc.) as an APC. Any APC would need to meet the requirements under the VSWMR [9 VAC-20-81-720.A, 740, and 760.A.1.] prior to approval.

### 19] If the facility has an existing well approved as an APC, can the facility use past data to request corrective action completion?

The Department may allow a facility to use past data collected from an existing well which is approved as an APC as a means of approving a request to terminate corrective action. This decision will hinge upon the magnitude under which the sampling results are found to not statistically exceed GPS. For example, if the GPS is 5 ppb and the sample results in the existing well are just below 5 ppb (i.e., 4.7 ppb), then the Department may require that the facility obtain additional sampling events to show there is no statistical exceedance (or a downward trend). In addition, several possible GPS CoC's may have breakdown products which do not exceed their GPS levels in the compliance well and thus were not sampled for previously, but which have a lower GPS than the parent compound. In cases such as these, APC approval may have a condition under which a full Table 3.1 sampling event is undertaken at least once at the new APC well.